APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,554	12/31/2003	Muraleedhara Herur Navada	10559-906001 / P17954	5716

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EXAMINER
NGUYEN, VAN KIM T

ART UNIT	PAPER NUMBER
2456	

NOTIFICATION DATE	DELIVERY MODE
05/13/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

		Application No.	Applicant(s)	
Office Action Summary		10/750,554	NAVADA ET AL.	
		Examiner	Art Unit	
		Van Kim T. Nguyen	2456	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _28 February 2009_.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-26_ is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-26_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a) ☐ All   b) ☐ Some * c) ☐ None of:

         1. ☐ Certified copies of the priority documents have been received.

         2. ☐ Certified copies of the priority documents have been received in Application No. _____.

         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   This Office Action is responsive to communications filed on February 18, 2009.

Claims 1-26 are pending in the application.

Response to Arguments

2.   Applicants' command regarding filing a terminal disclaimer upon an indication of

allowable subject matter is duly noted. Examiner is maintaining the double patenting rejection

until such time.

3.   Applicant's arguments with respect to claims 1-26 have been considered but are

moot in view of the new grounds of rejection.

Double Patenting

4.   The text of those sections of Title 35, U.S. Code not included in this action can be

found in a prior Office action.

5.   Claims 1, 3-5, 7-8, 10-12, 14-15, 17-18, 20-21, 23-24 and 26 are provisionally

rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable

over claims 1-2, 4-5, 7-9, 11-12, 14-15, 16, 18-19, 21-22, and 24-25, of copending Application

No. 10/749,792, respectively, in view of Sallet et al (US 6,490,276). Although the conflicting

claims are not identical, they are not patentably distinct from each other because the claims recite

substantially same limitations, except delivering the packet to an exception processor being

shared by the packet forwarding device in the stack. Sallet discloses a method for forwarding a

data frame from a first switch to a second switch, thus it would have been obvious to one of

ordinary skill in the art at the time the invention was made to apply Sallet's method of

forwarding data frames to the instance application in order to transmit data effectively.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting

claims have not in fact been patented.

Claim Rejections - 35 USC § 103

6.   Claims 1-2, 8-9, 15-16, 18-19, 21-22 and 24-25 are rejected under 35

U.S.C. 103(a) as being unpatentable over Asano et al (US 2002/0176426), in view of Hebb et al

(US 6,463,067).

Regarding claims 1, 8, 15, 18, 21 and 24, Asano discloses a method comprising:

receiving a packet at a first packet forwarding device in a stack of packet forwarding

devices configured to direct the packet to a destination external to the stack (e.g., a destination

address is extracted from each of the packets received at transfer device 40 and checked against

information stored in a table specified a destination port or output port via which the packet is to

be forwarded; Figures 1-5, ¶[0055-0063] and ¶[0092-0094]);

identifying an exception associated with the packet, wherein the exception includes an

occurrence of the external destination of the packet being unidentifiable (e.g., identifying the

validity/invalidity fields; Figures 15-16, ¶[0171] and ¶[0179]);

inserting a vector in the packet to indicate the identified exception (set the

validity/invalidity field to "1" if the information in the corresponding field is valid, otherwise set

it to "0"; Figures 15-16, ¶[0171] and ¶[0179]);

delivering the packet based on the inserted vector to an exception processor for processing the packet (¶[0190-0191]); and

delivering the processed packet from the exception processor to the packet forwarding devices to direct the packet to the destination external to the stack (¶[0191-0192]).

Asano does not explicitly call for the exception processor being shared by the packet forwarding devices in the stack.

As shown in Figure 2, Hebb teaches the exception processor (26) being shared by the packet forwarding devices (22-1...22-4) in the stack (col. 3: line 63 – col. 4: line 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Hebb's shared exception processor in Asano's system in order to enhance the efficiency and speed of communication, allowing for high-speed packet forwarding and classification.

Regarding claims 2, 9, 16, 19, 22 and 25, Asano-Hebb also discloses the vector includes a flag (ACK flag; ¶[0178]).

7.　　　Claims 3-4, 7, 10-11, 14, 17, 20, 23 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asano-Hebb as respectively applied to claims 1 and 8 above, in view of Salett et al (US 6,490,276), hereinafter Salett.

Regarding claims 3, 10, 17, 20, 23 and 26, Asano-Hebb does not explicitly call for using the vector and a table to determine a port for sending the packet to the first device in the stack of packet forwarding devices.

Salett teaches using the vector and a table to determine a port for sending the packet to

the first device in the stack of packet forwarding devices (using 64-bit word and CAM 213, 221

to transfer data frames between a port to a switch or between switches, e.g., when station A215

first transmits a data frame, it is received by switch 205 on port 4. The CAM 213 in switch 205

updates a station list contained in the CAM 213 to indicate that station A215 is on port 4; Salett,

col. 4: lines 39-50).

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to apply Salett's method of identifying stations and forwarding devices in Asano-

Hebb's system, motivated by the need to optimize the usage of network resources.

Regarding claims 4 and 11, Asano-Hebb-Salett also discloses the vector includes a bit

identifying the first device in the stack of packet forwarding devices (identifying the first device

in the stack of packet forwarding devices (the lower 56 bits of the 64-bit CAM cycle word is

used to indicate source or routing information for a data frame, with bits 48-55 are used to

indicate the network switches; Salett, col. 3: lines 44-63).

Regarding claims 7 and 14, Asano-Hebb-Salett also discloses the vector includes bits

respectively identifying the packet forwarding devices in the stack (the lower 56 bits of the 64-

bits CAM cycle word is used to indicate source of routing information for a data frame, with bits

48-55 are used to indicate the network switches; Salett, col. 3: lines 44-63).

8.   Claims 5-6 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Asano-Hebb- as respectively applied to claims 1 and 8 above, in view of Abali et al (US

5,721,820), hereinafter Abali.

Regarding claims 5 and 12, Asano-Hebb does not explicitly call for removing the vector

from the packet upon delivery the packet to the exception processor.

Abali teaches removing the vector from the packet for delivering the packet to the

exception processor (e.g., in source-based routing scheme, switches do not make any intelligent

routing decisions. The switch strips off the first word before forwarding the packet to the next

level in the network. Thus the packet contains no routing information upon arriving its ultimate

destination; col. 1: lines 46-65).

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to apply Abali's method of routing data in Asano-Hebb's system in order to provide

data routing in a topology independent fashion that satisfies cost, performance and resource

constraints.

Regarding claims 6 and 13, Asano-Hebb-Abali also discloses the packet is delivered over

a transmission line in an aggregate of transmission lines to the exception processor shared by the

packet forwarding devices in the stack (Abali; Figure 1, communications in the network is

facilitated by links connecting the processors or switches; col. 3: lines 3-25).

Conclusion

9.   Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN KIM T. NGUYEN whose telephone number is (571)272-3073. The examiner can normally be reached on 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Van Kim T. Nguyen
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/Bunjob Jaroenchonwanit/

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